United Nations ST/SG/AC.10/C.3/2018/16

Secretariat

Distr.: General
27 March 2018

Original: English

Committee of Experts on the Transport of Dangerous Goods and on the Globally Harmonized System of Classification and Labelling of Chemicals

Sub-Committee of Experts on the Transport of Dangerous Goods

Fifty-third session
Geneva, 25 June-4 July 2018
Item 3 of the provisional agenda
Listing, classification and packing

Proposal to include special provision 653 of the ADR in the Model Regulations

Submitted by the European Industrial Gases Association (EIGA)*

Introduction

1. In 2001, the Government of Austria initiated a multilateral agreement M114 intended to allow the carriage of carbon dioxide in conditions less stringent than those of European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR) to simplify the carriage of small cylinders with a capacity up to 0.5 litre for the preparation of carbonated water, and to allow carriage in packagings suitable for delivery services to consumers. The agreement was signed by Austria, Czech Republic, Germany and Norway, with a date of expiration of 1 January 2006. Germany submitted a proposal (ECE/TRANS/WP.15/AC.1/2005/53) to the RID/ADN Joint Meeting in 2005 to get the derogation included in the ADR and Regulation concerning the International Carriage of Dangerous goods by Rail (RID) and it was subsequently adopted in the ADR in 2007. The decision was partly based on the opinion of the Bundesanstalt für Materialforschung und Prüfung (BAM) (Federal Institute for Materials Research and Testing) that there was an infinitely small probability of leakage during transport. If for instance, the valve of a small carbon dioxide cylinder was not airtight, this would become apparent directly after filling at the filling facility and would be detected by leak testing or even if not the filled cylinder would already be empty at the start of transport or the release would be so minimal that the quantities of inert gas, for example carbon dioxide, released over time into a wagon/vehicle would not cause an appreciable increase in the atmospheric concentration of carbon dioxide.

2. The text of RID, ADR and the European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (ADN) was amended in 2007 and again in 2013 based on proposals from EIGA and Sweden to include additional gases for

* In accordance with the programme of work of the Sub-Committee for 2017–2018 approved by the Committee at its eighth session (see ST/SG/AC.10/C.3/100, paragraph 98 and ST/SG/AC.10/44, para. 14).

GE.18-04789(E)
1804789

Please recycle

applications including avalanche bags. The current version of special provision 653 reads as follows:

"653 The carriage of this gas in cylinders having a test pressure capacity product of maximum 15.2 MPa.litre (152 bar.litre) is not subject to the other provisions of ADR if the following conditions are met:

- The provisions for construction and testing of cylinders are observed;
- The cylinders are contained in outer packagings which at least meet the requirements of Part 4 for combination packagings. The general provisions of packing of 4.1.1.1, 4.1.1.2 and 4.1.1.5 to 4.1.1.7 shall be observed;
- The cylinders are not packed together with other dangerous goods;
- The total gross mass of a package does not exceed 30 kg; and
- Each package is clearly and durably marked with "UN 1006" for argon compressed, "UN 1013" for carbon dioxide, "UN 1046" for helium compressed or "UN 1066" for nitrogen compressed. This marking is displayed within a diamond-shaped area surrounded by a line that measures at least 100 mm by 100 mm.".

Proposal

3. SP 653 affords a rational and safe exception that should be included in the Model Regulations to allow it to be used for transport globally. EIGA is not aware of any negative safety implications since SP 653 was included in RID/ADR/ADN. It is therefore proposed that SP 653 be included in the Model Regulations.

4. In the Dangerous Goods List apply SP XYZ to the entries for UN 1013, 1046 and 1066.

5. In Chapter 3.3 include a new special provision XYZ as follows:

"XYZ The carriage of this gas in cylinders having a test pressure capacity product of maximum 15.2 MPa.litre (152 bar.litre) is not subject to the other provisions of these Model Regulations if the following conditions are met:

- The provisions for construction and testing of cylinders are observed;
- The cylinders are contained in outer packagings which meet the requirements of Part 4. The general provisions of packing of 4.1.1.1, 4.1.1.2 and 4.1.1.5 to 4.1.1.7 are met;
- The cylinders are not packed together with other dangerous goods;
- The total gross mass of a package does not exceed 30 kg; and
- Each package is clearly and durably marked with "UN 1006" for argon compressed, "UN 1013" for carbon dioxide, "UN 1046" for helium compressed or "UN 1066" for nitrogen compressed. This marking is displayed within a diamond-shaped area surrounded by a line that measures at least 100 mm by 100 mm.".

Justification

6. his proposal will assist the transport of small cylinders of inert gases.